

## Editorial

# Legacy of German Psychiatric Genetics: Hindsight Is Always 20/20

Irving I. Gottesman and Aksel Bertelsen

*Department of Psychology and Division of Medical Genetics, University of Virginia, Charlottesville, Virginia (I.I.G.);  
Department of Psychiatric Demography, Psychiatric Hospital in Aarhus, University of Aarhus, Aarhus, Denmark (A.B.)*

The history of psychiatric genetics is informed by this paper, which serves to review the legacy of German psychiatric genetics and its antecedents during the twentieth century. It also serves as an introduction to two new annotated abstracts of basic research papers on family studies of schizophrenia by Ernst Rüdin in 1916 and by Bruno Schulz in 1932, submitted by Kenneth Kendler and Edith Zerbin-Rüdin, together with another paper by them describing the origin and activities of Rüdin's Munich School of Psychiatric Genetics (1917–1945). Our paper also introduces an invited critical summary of the work of Ernst Rüdin by his biographer Matthias M. Weber, a medical historian working in the Historical Archives of the Clinical Institute of the Max Planck Institute of Psychiatry in Munich. We raise a number of bioethical questions in the context of the uses and misuses made of genetic information in the service of the Nazi programs of eugenics, "euthanasia," and genocide. © 1996 Wiley-Liss, Inc.

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"Those who cannot remember the past are condemned to repeat it." G. Santayana (1905).

"I come to bury Caesar, not to praise him.  
The evil that men do lives after them,  
The good is oft interred with their bones."  
W. Shakespeare (Julius Caesar, act III,  
scene ii, line 79).

"He that is without sin among you, let him cast the first stone . . ." John 8:7.

"Science is, among other things, a social activity, and the politics of those who practice it is part of that science." R.N. Proctor [1988, p. 9].

## INTRODUCTION

Informed and weakly armed by such quotations and aphorisms, we will attempt to provide an introduction and historical framework for the papers that follow. The editors of this journal welcomed the opportunity to publish the early papers on family studies of schizophrenia by psychiatric geneticists of the "Munich School," when Kenneth Kendler and Edith Zerbin-Rüdin submitted lengthy abstracts with commentaries for the classical studies by Rüdin [1916] and Schulz [1932]. Concerned that the straightforward publication of the translations without comment on the historical context and aftermath associated with Nazi eugenics and war crimes could be construed as insensitive or exculpatory, the translators were invited to add short introductions to characterize the research environment of that era; their response, however, avoided political and bioethical issues. Coincidentally with the processing of these three papers, Weber [1993] published an extensive and intensive critical biography of Ernst Rüdin. As he is employed in the historical archives of the clinic of the Max Planck Institute for Psychiatry as a medical historian and had complete access to vast sources of published and unpublished documents, together with interviews of eyewitnesses to this era, his work is definitive. Our task of introduction was made considerably easier by Weber's willingness to provide this journal with a judicious summary of his data and conclusions. The latter, however, is no substitute for reading the whole book, which contains bibliographies of the work published by Rüdin, Schulz, and Hans Luxenburger, as well as the extensive documentation for his research.

"Double jeopardy" is a doctrine in common law that prevents a defendant from being tried twice for an alleged criminal act. Historical approaches to the reconstruction of human behavior appear to be exempted from such constraints, and, as novices, we have tried to guard against such impunity leading to two equally repugnant outcomes: the demonization of behaviors or in-

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Address reprint requests to Prof. I.I. Gottesman, Gilmer Hall, University of Virginia, Charlottesville, VA 22903.

ferred motives from the past, or their whitewashing/exoneration, once hindsight reveals the flaws and their consequences.

With their new translations Kendler and Zerbin-Rüdin have disinterred some "good;" the "evil" (cf. above quote from Shakespeare) also needs an airing. The antecedents and legacy of German psychiatric genetics can only be sketched in the papers, but the guides presented by the bibliographies of the papers will reward the reader with a more profound understanding of the issues involved. Fifty years after the end of World War II, the Nuremberg War Crimes Trials, and the associated Denazification Tribunals, the world cannot erase "loose associations" to crimes against humanity, Nazi eugenics, the murder of mental patients, and genocide. Bioethical questions aroused by this venture into the historical roots of modern psychiatric genetics are timeless and cannot be avoided:

Should research be encouraged and conducted if the results could lead to future misuses?

Should the fruits of scientific research be directed at the human/societal collective, or, should the results benefit and protect the individual human being?

Should scientists/teachers/clinicians conducting their work under political regimes at odds with their beliefs and values dissent at *any* cost, or should they collaborate in the hope of salvaging a portion of their programs?

Should the subsequent acceptance of scientific data depend on the integrity and moral character of the scientist and on the manner by which the data were acquired?

For the record, Edith Zerbin-Rüdin, daughter of Ernst, was born in 1921 and was, therefore, age 12 when Adolf Hitler came to power in 1933, and age 24 when she completed medical school in 1945. She has been a friend and professional colleague for some 30 years. She has been most generous and courageous in making available to us unpublished materials connected with her father's prewar career as well as documents used by both the prosecution and the defense at her father's denazification trial (1945–1946). The materials are archived in Berlin, Archive of the History of the Max-Planck-Society.

In their description of the Munich school, Zerbin-Rüdin and Kendler state that "a veil has fallen over much of twentieth century psychiatry produced before World War II, the time in which Germany was the world center of psychiatric research," largely because of the language barrier and what they call "presentism" (a kind of narrow focus on an ahistorical present). With hindsight, we must add that the results from the early research of Rüdin and his disciples were used uncritically as the foundation stones for the laws and practices of the Nazi regime to support and to condone compulsory sterilization, "euthanasia" of handicapped children and mentally-ill adults, and a program of genocide that resulted in a rejection of, and revulsion toward, *all* genetic approaches (inhumane as well as humane) to psy-

chopathology from the time of the war crimes trials up to the present. In effect, the veil turned into a shroud.

Rüdin (1874–1952) was a Swiss-born German psychiatrist with dual citizenship who had been well-trained with Eugen Bleuler (1857–1939) in Zurich and Emil Kraepelin (1856–1926) in Heidelberg. His brother-in-law, Alfred Ploetz (1860–1940), founder of the racial hygiene movement in Germany at the end of the last century, was a major influence on his thinking even before he went to medical school. Both shared a zealous concern for the evils of alcohol, as did Kraepelin, as a menace to public health and the gene pool; at an international congress in 1903 Rüdin proposed sterilization for chronic alcoholics, but this was not well-received [Weindling, 1989]. With Ploetz, he founded the Society for Racial Hygiene (= eugenics) in 1905 (becoming international in 1907), almost simultaneously with their inauguration of what would become a major international outlet for both eugenic and human genetics papers, the Archives of Racial and Social Biology [Proctor, 1988; Weber, 1996; Weindling, 1989].

When Kraepelin founded the world's first institute for psychiatric research in Munich in 1917, it was in the midst of World War I. He had Rüdin at his side as head of the Genealogical Demographic Department. Devastated by the ravages of war and defeat with its heavy toll of military and civilian casualties, starvation, an influenza epidemic, and a declining birthrate, postwar Germany was ripe for radical measures and attitudes that could protect and restore the country. It is difficult to appreciate the chaos and anarchy at this distance. Kraepelin was a member of an ultranationalist party [Shepherd, 1995; Weindling, 1989; Burleigh, 1994] and very involved with politics and policy, quite in contrast to his "benign" image in the history of psychiatry. Both he and Rüdin were committed to an evangelistic, authoritarian, reformist approach to mental illness and health, with the goal of strengthening German nationalism and hastening the recovery from the war. It fit with their prewar values to consider prophylactic eugenic measures to reduce the burden on the nation's physical and economic health due to alcoholism, mental diseases, and criminality. Unemployment rates were about 30% in Germany, Britain, and the Scandinavian countries.

Foreshadowing the crimes that would be committed later on in the name of "cost-effectiveness," but understandable in light of the sentiments above, a chilling tract was published in 1920 by Karl Binding, retired professor of constitutional law, and Alfred Hoche, a professor of psychiatry, with the title "Permission for the Destruction of Life Unworthy of Life" [Binding and Hoche, 1920]. In a thesis that would prove influential with their contemporaries and future leaders of the Nazi hierarchy, the authors argued in favor of involuntary euthanasia for the terminally ill or mortally wounded, the severely retarded, and the mentally ill. Such ideas went into partial hibernation without majority support, only to awaken with a vengeance in 1938 [Aly et al., 1994; Burleigh, 1994; Proctor, 1988].

Elsewhere in Europe and the United States, enthusiasm was growing for sterilization as a solution to the

alleged genetic (simple Mendelizing) transmission of mental retardation, criminality, and mental diseases. Legislation was passed based on a dim and invalid understanding of available data, but, nonetheless, such laws were first passed in Indiana in 1907, in California in 1909, and in 15 other states by 1925. Accompanying laws prohibiting the marriages of the "insane and feeble-minded" were equally prevalent, all in the name of eugenics [Reilly, 1991; Haller, 1963; Kevles, 1985]. The first European country to pass eugenic sterilization laws was Denmark in 1929, followed shortly by the other Scandinavian countries [Haller, 1963; Roll-Hansen, 1989; Proctor, 1988]. Aside from the critical issue of the validity of such procedures, the question of voluntariness vs. compulsion was usually on the side of the former, often with consent of a guardian involved for those unable to give informed consent. The laws in the Scandinavian countries continued to evolve in a direction that strengthened the rights of individuals vs. those of the state.

In Germany, Rüdin took the lead in advocating vigorously for eugenic sterilization, informed by his own research on the genetic aspects of psychopathology [Weindling, 1989; Lifton, 1986; Proctor, 1988]; his 1929 monograph argued that mental illness could be predicted and prevented by sterilization [Psychiatric Indications for Sterilization]. The latter, of course, would have to be based on the assumption that all mental disorders were transmitted as single major locus disorder with high penetrance. Paradoxically, public health officials and socialists favored sterilization as a means of birth control to relieve poverty and the burden on mothers, but Hitler and his Nazi party, enthusiastically pronatalist, favored it for reasons of efficiency and to eliminate "hereditary diseases." At the end of 1932 draft legislation was presented to the German parliament with wide support; it was aimed at sufferers of hereditary mental illness or mental retardation, epilepsy, or other hereditary diseases, and it was *voluntary*, requiring consent by the patient, parents, or guardian, and a decision from a "tribunal of two doctors and a lawyer."

Rapid changes in governance overwhelmed legislative deliberations, and the Nazi takeover resulted in an avalanche of so-called eugenic and specifically antisemitic legislation. In the German elections of 1932 the Nazi Party won a plurality of seats (230 of 549) and, although Hitler lost the presidential race to Hindenburg (11 million to 18 million votes), he was appointed Chancellor in January, 1933. In the next election the Nazi party received 92% of all ballots. Important details of rapid changes in German society are detailed in Weindling [1989, pp. 450–488, 522–564] and Proctor [1988, pp. 95–222].

The Law to Prevent Hereditarily Sick Offspring by using *compulsory* sterilization came into effect by decree—Hitler had dissolved the parliament—published July 26 to be effective as of January 1, 1934. Sterilization, which had been considered legally as a form of assault, was now both legal and compulsory. The final form of the law was credited to Gutt, a public health physician, member of the Nazi party (July 1932) and the SS, and an official

in the Reich Ministry of the Interior, consulting closely with Rüdin and a lawyer named Ruttke. Weindling [1989, p. 525] comments that this and the subsequent law (November, 1933) against compulsive criminality, authorizing preventive detention and castration, "... were regarded by Gutt, Rüdin, and Ruttke as demonstrating that liberal and Christian humanitarian solutions to disease and crime were outmoded. Hereditary defects were to be eliminated by medical intervention so that future generations would be free from crime and disease." The three men wrote an extensive guide to the implementation of the laws (1934), widely distributed to all physicians in Germany. Implementation required setting up an extensive system of 205 eugenic courts plus 31 courts of appeal, each run by a lawyer, a public health physician, and a physician knowledgeable about eugenics [Lifton, 1986; Proctor, 1988; Lewis, 1934]. As spelled out elsewhere [Weindling, 1989; Weber, 1993], the laws selected nine "diseases" for attention, including schizophrenia, manic-depressive disorder, epilepsy, and alcoholism.

Some indication of the atmosphere that prevailed in Nazi Germany can be gathered from a sampling of the egregious legislation enacted during the Third Reich: the implications for the "reputation" of psychiatric and human genetics as disciplines are clear. A consensus exists [Proctor, 1988, p. 109] that at least 400,000 men and women underwent "eugenic sterilizations," with most completed from 1934–1937, at a rate of 50,000 per year [cf. Reilly, 1991, for a figure of 3.5 million].

1933: Civil Service Law requiring proof of Aryan ancestry to hold federal job.

Compulsory Sterilization Law (see above).

Law Against Career Criminals (see above).

1935: Law to Protect German Blood and Honor, forbidding marriage and intercourse between Jews and Germans.

Marital Health Law, marriage applicants screened for genetic fitness, and if unfit, referred for sterilization.

Citizenship Law, Jews deprived of civil rights; physicians with Jewish spouses forbidden to practice medicine within the social insurance program

1938: All physician licenses for Jews revoked; forbidden from changing first or last names; permitted to practice medicine only on other Jews after permission.

Goebbels orders prohibition of Jews from all cultural events, barring them from attending German schools. Movements restricted to certain neighborhoods; Jews can be confined to their homes.

Any book authored by a Jew must be printed with a distinguishing font.

1941: Police ordinance requires all Jews to wear Star of David on external clothing.

It is sad, in hindsight, to recall that in the summer of 1936, apparently oblivious to the erosion of civil rights, 53 nations sent their 5,000 athletes to participate in the Olympic Games in Berlin presided over by Adolf Hitler.

In the spring of 1937, a secret and illegal action was launched by the Gestapo that resulted in the forced sterilization of 500–800 adolescents because they had black fathers (the mothers were German) and could thus add “black genes” to the Aryan gene pool. The children were born as a result of the occupation of the Rhineland by French African troops after World War I and were easy targets for racism. As early as 1927 the Bavarian Health Minister had requested permission to have the “Rheinlandbastarde” sterilized, but this was denied as illegal. A committee on which Rüdin served considered the question again in 1935 and recommended either sterilization after parental “persuasion” and permission or, preferably, forced emigration [Proctor, 1988; Weindling, 1989]. The only detailed report of the subsequent Gestapo action in 1937 is provided in Pommerin [1979], not translated into English.

An escalation of applied negative eugenics to the murder of children and adults with alleged genetic diseases, overseen by the Committee for the Scientific Treatment of Severe, Genetically Determined Illness [Proctor, 1988; Burleigh, 1994], was phased in, beginning in 1939, as the sterilization program did not meet the exigencies of wartime. This “T-4” “euthanasia” program was kept a closely-guarded secret and was a separate action from the later massive killings (code name, “Aktion 14f13”) that would characterize the Holocaust [Weindling, 1989; Lifton, 1986; Caplan, 1992b]. It is important to note that sterilizations were sanctioned by the laws of the day and were, therefore, not prosecutable after the war. The medical killings and the Holocaust deaths were not protected in this sense. Nine professors of psychiatry and 39 other physicians were instrumental in carrying out Hitler’s secret instructions to commence the action in 1939 (Burleigh [1994] contains the most details). Professor Rüdin was not directly involved in this mayhem; when he learned of it in 1940, he declared it to be murder [Weber, 1993, p 274]. He had finally joined the Nazi party in 1937 (following 50% of all physicians), rationalizing after the war that this was necessary to preserve his life’s work, his research institute, and its funding, and to protect his staff, including Jews, for as long as possible [cf. Weber, 1993, 1996]. By the “end” of the T-4 program in autumn 1941, between 70,000–95,000 child and adult patients had been killed [Weindling, 1989; Burleigh, 1994]. Falsified death certificates were sent to the families of victims with causes such as pneumonia. Lost and destroyed records prevent a more accurate estimate, but great detail is available to support the lower number above, along with details of the savings effected [National Archives of the United States, 1945]. At least 30,000 more were victims of mandated starvation, barbiturate injections, etc., after 1942 [Weber, personal communication, 1996]. The enormity of these crimes resulted in punishments for some of the perpetrators at the well-known Doctors’ Trials, just one of the 12 military Nuremberg Trials after the International Military Tribunal had dealt with the inner circle of 24 major Nazi war criminals [Taylor, 1949, 1992; Rosenbaum, 1993]. Of 23 doctors tried, 7 received death sentences, and 5, life sentences. The stories involving extensions

to the mass exterminations of millions, relevant as that might be [Dawidowicz, 1990; Friedlander, 1995], cannot be pursued here.

In the aftermath of the Allied victory and following the military trials against war criminals (a further 489 proceedings after those above), the victors assumed the political burden of bringing democracy to Germany, and that required “denazification” of the civilian population [Taylor, 1949; FitzGibbon, 1969; Zink, 1947; Bower, 1982]. It sounds impossible and it was. Schooling, universities, local governments, health care, and police forces were to be “sanitized.” Each of the occupation governments formulated their own plans, but only the American Zone plan will be explored, as it covered Munich and Frankfurt. The task was turned over to German civilian tribunals (*Spruchkammern*) to enforce law no. 104 of the U.S. Military Government, the Law for Liberation from National Socialism and Militarism. Each of the 13.5 million adults in the American Zone was compelled to fill in a 131-item questionnaire about their activities since the war began in 1939, so that sanctions could be applied. The Trial Tribunals were composed of local citizens (like a “grand jury”) known to be active opponents of National Socialism (many mistakes were made in selection) [FitzGibbon, 1969; Taylor, 1949; Ziemke, 1975; Bower, 1982] as well as a public prosecutor and a defense attorney. Four degrees of culpability were established, plus exoneration (wholesale amnesties for some 3 million Germans were implemented to reduce the caseload when “gridlock” occurred); major offenders could receive up to 10 years in prison; offenders, up to 5 years; lesser offenders, fines up to 10,000 marks; and followers, fines up to 1,000 marks. Throughout the Allied Zones of Germany there were some 12 million known members of the Nazi Party, itself sufficient cause to be chargeable before the tribunals.

Rüdin was caught up in this system, suspicion having been aroused by his loss of Swiss citizenship, and he was removed from his position in Munich in the autumn of 1945. He was detained in various camps and prisons as a “security threat” from December 15, 1945 until his release for deteriorating health in August, 1946. He was eventually found guilty at his first denazification trial at level III (Lesser Offender), along with 107,000 others during that period. On appeal his degree of guilt was reduced to level IV (Follower), along with 488,000 others (in a period ending in 1951), and he was fined 500 marks. A total of some 620,000 Germans was found guilty by the tribunals at all four levels before the system was abandoned.

What are we the authors, and you, our peer readers, to make of all this? Perhaps 50 years is not yet enough time to render a final evaluation. We have chosen to share some of the insights we have gathered from a contemporary of Rüdin, Franz J. Kallmann (1897–1965), forced to emigrate from Nazi Germany in 1936 and subsequently becoming the first voice for modern psychiatric genetics in the U.S.A. [Rainer, 1966]. The research contributions of Kallmann, along with those of Essen-Möller, Slater, Strömberg, and Sjögren, all of whom were mentored by Bruno Schulz, not Rüdin [cf. Essen-

Möller, 1958; Strömberg, 1994], can be also be seen as part of the legacy of the prewar Munich school. Our information derives from correspondence between Rüdin and Kallmann at the time of the former's impending denazification trial, only a paragraph of which has been made public heretofore [Weber, 1993, p. 297]. Edith Zerbin-Rüdin provided us with a copy of the correspondence at our request after we had read the paragraph in Weber's biography, along with copies of some 50 documents from the trial.

In a letter dated May 23, 1947 from Rüdin to Kallmann (written in German and kindly translated for us by Dr. N. Erlenmeyer-Kimling) he says, in part,

I would greatly appreciate your confirming as soon as possible some facts about the relationship between you and me . . . I ask for your certification that my institute gave you all possible help in the processing and evaluation of your schizophrenia material during your research tenure in 1929 to 1935, and that you left Munich and Germany without pressure from me . . .

And Kallmann, in a letter to Rüdin ("to whom it may concern") dated June 30, 1947 says, in part,

As a previous member of Dr. Rüdin's research staff and as a research worker in a field of medical science, which owes much to Dr. Rüdin's earlier pioneer work, I am unable to refuse this request, although for a variety of personal reasons I should have preferred to maintain a neutral position in this matter . . . My reluctance is largely due to the inability to form an unbiased opinion as to the essentiality of these facts in relation to Dr. Rüdin's alleged political activities about which I have no direct information.

. . . My personal acquaintance with Dr. Rüdin was limited to the years 1929 to 1935 and, because of the executive nature of his position, was rather superficial in nature. Since 1936, the year in which I left Germany because I came from a Christian family of partly Jewish ancestry [Kallmann's father had converted from Judaism], I have had no contact of any kind with Dr. Rüdin or any member of his family . . . As a scholar, he was a highly unselfish, idealistic and enthusiastic dreamer, obsessed with the idea that the future happiness of mankind required eugenic legislation for, and concerted sacrifices of, the present generation. He was neither politically-minded nor brutal in his personal ways of life, but he was easily carried away by his scholarly enthusiasm and his rather unorthodox schemes of eugenic procedure. Evidently, scientific and cultural progress needs men like Dr. Rüdin, but there should be proper safeguards against their becoming involved in politics.

What Dr. Rüdin did for me during the beginning of the Hitler regime, or more precisely, what he did not do against me, was plainly motivated by the fact that I happened to work on certain genetic research . . . It probably never occurred to him, a foreigner of Swiss nationality, that I had at least the

same moral and legal rights as he had to continue to live a decent and respectable life in Germany. I also doubt that he thought much of the miseries of those millions who were ruthlessly persecuted by a regime which aggrandized his scientific work at the price of forcing him to become a political boss . . . If he was guilty at all, his guilt was largely one of omission rather than commission . . . He is no criminal, of course, and he certainly deserved a better fate at the end of a long life which was devoted to scientific progress and the betterment of mankind as he understood it. If he had to be penalized, he received sufficient punishment through the complete collapse of his scientific dream-world and through the irreparable damage to his reputation as a scientific worker. I do not think that anything could possibly be gained at this point by punishing him still more, and I sincerely hope that he will be able to spend the rest of his life as a humble but free man who can contemplate on the philosophical ideals of individual freedom and on the relative values of human health and happiness.

We are content to let Kallmann have the last word for now.

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